

Amendments to the Claims:

What is claimed is:

1. (Currently Amended) An antenna structure comprised of:

(a) a ~~quadrifilar~~ helix antenna; and

(~~b~~) substantially parallel and substantially concentric metallic rings positioned around the longitudinal axis of the ~~said quadrifilar~~ helix antenna and along at least one of a the total length or a partial length of the quadrifilar helix antenna, wherein the substantially concentric metallic rings are parasitically coupled to the helix antenna.

2. (Currently Amended) The antenna structure of claim 1 where the ~~said quadrifilar helix antenna~~ is ~~replaced by other~~ a multifilar helix antennas such as a bifilar helix antenna.

3. (Currently Amended) The antenna structure of claim 1 where the ~~said quadrifilar helix antenna~~ is ~~replaced by~~ a standard monofilar helix antenna.

4. (Currently Amended) The antenna structure of claim 1 where the ~~said quadrifilar helix antenna~~ is etched on a flexible substrate.

5. (Currently Amended) The antenna structure of claim 1 where at least one of the ~~the said~~ metallic rings are etched on the same substrate as the ~~said quadrifilar~~ helix antenna.

6. (Currently Amended) The antenna structure of claim 1 where at least one of the ~~said~~ metallic rings are etched on a different substrate than that of the ~~said quadrifilar~~ helix antenna.

7. (Currently Amended) The antenna structure of claim 1 where the ~~said~~ metallic rings are part of a the radome that houses the said quadrifilar helix antenna.

8. (Currently Amended) The antenna structure of claim 1 where at least one of the ~~said~~ metallic rings is an open ended metallic loop.
9. (Currently Amended) The antenna structure of claim 1 where at least one of the ~~said~~ metallic rings is connected to at least one other ring.
10. (Currently Amended) The antenna structure of claim 1 where at least one of the ~~said~~ rings or loops is electrically connected to at least one antenna helical element.
11. (Currently Amended) A method for reducing the height of a helix antenna by using substantially parallel and substantially concentric metallic parasitic rings positioned around the longitudinal axis of the ~~said~~ helix antenna and along at least one of a the total length or a partial length of the ~~said~~ helix antenna.
12. (Currently Amended) A method for tuning a helix antenna by using substantially parallel and substantially concentric metallic parasitic rings positioned around the longitudinal axis of the ~~said~~ helix antenna and along at least one of a the total or a partial length of the ~~said~~ helix antenna.
13. (New) The antenna structure of claim 1, where the helix antenna is a quadrifilar helix antenna.
14. (New) The antenna structure of claim 8, where the open ended metallic loop is formed from one or more open ended rings.
15. (New) The antenna structure of claim 8, where the open ended metallic loop includes overlapping rings.

16. (New) An antenna structure comprised of:

a mast-type antenna; and

substantially parallel and substantially concentric metallic rings positioned around the longitudinal axis of the mast-type antenna and along at least one of a total length or a partial length of the antenna, wherein the substantially concentric metallic rings are parasitically coupled to the mast-type antenna.

17. (New) The antenna structure of claim 1, where the mast-type antenna is a quadrifilar helix antenna.